# chapter 10

# **On-Site Wastewater Systems**



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## **Program Assistance**

**ir Regulations** - For questions on air regulations, compliance inspections, or enforcement actions, contact your Region Office Air Program Manager (refer to Chapter 1). **Authorized Agents** - For information on an authorized permitting agent or how to become one, call the TNRCC Region Office in your area.

**Grants** - For Information on possible grant funding call the Texas Community Development Program at 512/475-3882

**Occupational Certification** - For information regarding on-site sewage facility installer certification, call Occupational Certification Section at 512/239-2150.

**On-Site Permits, Fees and Inspections** - For information regarding the TNRCC On-Site Wastewater Program, call Field Operations at 512/239-0400.

# State and Local Authority

#### **State**

The Texas Health and Safety Code (THSC), Chapter 366 delegates responsibility to TNRCC for regulating the location, design, construction, installation, alteration, operation, and maintenance of on-site sewage disposal facilities (OSSFs). TNRCC may also impose and collect permit fees for construction, installation, and alteration (including repair or extension of on-site sewage disposal systems) to cover the cost of any OSSF design review or system inspection.

### Local

TNRCC may transfer OSSF program authority to any local governmental entity that has passed a resolution requesting that authority. As an authorized agent (AA), a local government is responsible for all aspects of the program, including permitting, enforcement, and fee collection.

## Program Requirements

A TNRCC permit is required for most OSSF activities. A general description of the permit process is provided in Chapter 3. TNRCC strongly encourages anyone planning an activity that may require a permit or registration to discuss it with TNRCC staff well in advance of applying for a permit or registration. This will prevent unnecessary difficulties with processing applications or amendments as the project develops and allow TNRCC staff to provide technical assistance as needed. Contact the Local Government Assistance Office (800/687-9222 or 512/239-5300) for help.

### **Permits**

A permit is required any time construction, installation, or alteration (including repair or extension of any on-site sewage disposal system) of an OSSF occurs. The only exception is an OSSF for a single family residence located on 10 acres or more.

This permit may be issued by either TNRCC or AA. For either permitting authority, procedures for obtaining a permit include:

- ▼ Completion and submittal of an application;
- ▼ Payment of the appropriate fees; and

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▼ Satisfactory completion of on-site inspections.

Planning applications for standard systems are reviewed within ten working days from the date the application packet is determined to be administratively complete. Planning applications for non-standard designs (such as aerobic systems that require professional engineers) are reviewed within 30 working days from the date the application packet is determined to be administratively complete.

AAs should be consulted to determine their permit processing schedules. A list of current AAs is provided at the end of the chapter. For questions on AAs, contact your Region Office (refer to Chapter 1).

#### **Air Regulations**

In addition to the water program requirements noted above, an OSSF project must also be evaluated for any impact on air quality. No action can legally result in a condition of nuisance smoke, odor, dust or aerosol, cause a traffic hazard, or contribute to a condition of air pollution. Nuisance and traffic conditions are referenced in 30 TAC Chapters 101.4 and 101.5.

There may also be specific air regulations that affect an OSSF permit application. For more information on air requirements, contact the Air Program Manager at your TNRCC Region Office (refer to Chapter 1).

## Reports

There are no routine reporting requirements associated with OSSF permits issued by TNRCC. Again, AAs should be consulted for any local program reporting requirements.

### **Fees**

#### **Application Fees**

TNRCC is authorized to collect fees to cover the cost of OSSF design review and systems inspections under THSC Chapter 366. The fee for an OSSF permit issued by TNRCC is \$100 for a standard facility and \$250 for each non-standard facility that requires the submission and review of planning materials prepared by a registered professional engineer or registered professional sanitarian. This fee is deposited into the State General Revenue Fund.

#### Texas On-site Wastewater Treatment Research Council Fees

An additional fee of \$10 is assessed on each permit to support the Texas On-site Wastewater Treatment Research Council. The Council conducts technical research on OSSFs, focusing on the exploration of innovative technologies and provision of grants for local demonstration projects.

#### **Installer Fees**

All OSSF installers are required by HB 1875 (71st Legislature) to be licensed by TNRCC. Once they complete the initial training course and are registered, installers can maintain their registration by paying an annual registration fee of \$25. OSSF inspectors must also be licensed by TNRCC. TNRCC has not yet developed final rules on requirements for licensing OSSF inspectors.

## **Inspections**

A generic description of the inspection process is outlined in Chapter 3. For more detailed information on any aspect of the inspection process, contact the TNRCC Field Operations Division (512/239-0400) or your Region Office (refer to Chapter 1).

OSSF inspections assure that any construction, installation or alteration has been done according to the construction standards outlined in the Texas Administrative Code (TAC). Some inspections are part of the permitting process and are required prior to an applicant receiving an OSSF permit.

When reviewing OSSFs, inspectors will be looking for the following:

- Minimum tank size required and tank size installed, percolation rate, minimum trench bottom area required and trench area installed;
- ▼ Proper type of pipe from structure to disposal system, slope of the sewer, location of cleanouts and metallic locating tape;
- ▼ Inlet flowline distance from outlet flowline, inlet and outlet liquid penetration depth, risers provided on buried tanks, and "T" provided on inlet and outlet:
- **▼** Type of tank;
- Drainfield trench width and depth, distance between trenches, type and diameter of pipe

- in trench, endcaps in place, and proper barrier between gravel and backfill;
- ▼ For gravelless pipe, fabric cover location and type and depth of media used; and
- ▼ Distances from water wells, underground cisterns, pump suction pipes, water supply lines, property lines, streams, ponds, lakes, sharp slopes, breaks, foundations, structures and surface improvements, easement lines, soil absorption systems and swimming pools, as required by construction standards.

An inspection by TNRCC must be requested at least five working days before the proposed date of installation and conducted within two working days after the date of notification that the system is installed and ready for inspection. A notice of approval is issued within ten days of a satisfactory inspection. An On-Site Facility Inspection Checklist is provided at the end of this chapter. AAs should be consulted to determine their inspection guidelines.

## **Enforcement**

A general description of the enforcement process is outlined in Chapter 3. If air quality violations are involved, the process is mandated by State law and differs slightly. The violation is either resolved within 30 days from receipt of a notice of violation (NOV), or the matter is referred to Central Office for formal enforcement proceedings. You are advised to contact your Region Office immediately for information on handling violations or to request technical assistance.

If a complaint or a permitting violation is reported to the TNRCC Region Office, investigated, and found to be valid, an NOV is issued to the owner. The owner is then given 30 days to make substantial progress towards correcting the violation. If no progress has been made at the end of the 30-day period, the regional inspector will generally file a criminal complaint against the homeowner in a Justice of the Peace Court and ask for a ruling by the judge.

It should be noted that each day that an OSSF remains in violation constitutes a separate offense. OSSF enforcement cases are frequently pursued as misdemeanors through the Justice of

the Peace Courts as this has proved the most effective and efficient way to stop violations.

The TNRCC is developing rules to address OSSF violations through its civil, administrative penalties process. Until these rules are in place, TNRCC may also refer a violation to the Attorney General's Office for civil action.

## **In Addition**

## Frequently Asked Questions

Do I have to get a permit to install a septic system?

Yes, if you construct, alter, extend, or repair a system you must get a permit from either TNRCC or an AA. You may contact the TNRCC Region Office in your area for more information on obtaining a permit (refer to Chapter 1). If TNRCC is not the permitting agent, the Region Office will refer you to the local AA.

Can I install my own septic system?

Yes, but the system must comply with the State construction standards as defined in 30 TAC Chapter 285. The TNRCC Publication No. RG-134 outlines the construction standards, and may be obtained by calling the Publications Office at 512/239-0028.

If I own 10 acres do I have to get a permit?

First check with your AA. If you do not know who your AA is, contact your Region Office (refer to Chapter 1). If you do not have an AA, you do not have to get a permit. However, your system must still comply with the State construction standards.

Can I hire someone to just dig my trenches?

Yes, as long as that person is registered as an installer. Any registered installer should be able to provide you with a copy of his/her installer certification card. The TNRCC issues this card to installers upon successful completion of certification requirements.

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#### Other Assistance

The Texas Department of Housing and Community Affairs' Texas Community Development Program (TCDP) issues grants to cities or counties to fund OSSF projects. Grant applications are accepted once a year and awarded on a competitive basis. For further information about this opportunity, contact TCDP at 512/475-3882.

The Comptroller's Office also maintains a listing of federal and state grants available to local governments on its Window on State Government electronic bulletin board. (Refer to Chapter 2, State and Federal Electronic Information Sources, for information on how to access this bulletin board.)

# **Significant Laws** and **Regulations**

The following is a brief summary of the State laws and regulations relating to OSSFs. Please refer to the official rules for specific questions regarding compliance and applicability. The TNRCC publication "Regulatory Resource" (Gl-32) contains detailed information about obtaining copies of the Agency's rules (see Appendix 4). The TNRCC Rules are also accessible from the Agency bulletin board. Refer to OnLine Services in Chapter 2 for more details.

#### **State Laws**

Texas Health and Safety Code (THSC) Chapter 341

Establishes minimum sanitation and health protection standards.

Defines public health nuisances as including sewage, wastewater or other organic wastes

deposited, stored, discharged or exposed in such a way as to be a potential instrument or medium in disease transmission.

Allows TNRCC and other agencies, to enforce criminal or civil penalties to correct public health nuisances.

#### THSC Chapter 366

Charges TNRCC to regulate the location, design, construction, installation, alteration, operation, and maintenance of OSSFs.

Allows TNRCC to delegate authority to local entities; these AAs may then act on behalf of the Agency to regulate OSSFs.

Grants TNRCC and AAs authority to collect a permit fee for construction, installation, and alteration of OSSFs.

#### THSC Chapter 367

Establishes the On-Site Wastewater Treatment Council for the purpose of conducting research on OSSFs.

Authorizes TNRCC or AAs to collect a \$10.00 fee for each OSSF permit issued; this fee supports the Council. The total fees collected may not exceed \$221,000 per annum.

#### **State Regulation**

30 Texas Administrative Code (TAC) Chapter 285

Implements the OSSF program authorized by State law.

Establishes permitting authority, application processes, installer registration, TNRCC oversight authority, and penalties.

Establishes construction standards for OSSFs.

# **On-site Inspection Checklist**

County		Permit No.	
Property Owner		Date of Issu	ie
Address			
Installer Address			
Location/Legal			
Description			
Description of Structure			
Minimum Tank Size Required			
Percolation Rate min/inch			
Minimum Trench Bottom Area Required	Installed		
I. Sewer			
1. Proper type pipe from structure to disposal system?	_		
2. Slope of sewer 1/4 in/ft?			
3. Cleanouts properly located?			
4. Metallic locating tape over all piping to and within disposal area	.5		
II. Septic Tank			
1. Inlet flowline 3" above outlet flowline?			
2. Inlet liquid penetration 6"?			
3. Outlet liquid penetration 1/4 to 1/2 total liquid depth?			
4. Risers provided on tanks buried 12"?			
5. "T" provided on inlet and outlet?			
6. Type of tank		urer's name	
7. If single tank, are two compartments provided?			
III. Drainfield			
1. Trench bottom 12" lower than outlet flowline?	_		
2. Trenches at least 75 feet long?			
3. Trench width (must be at least 36")?	_		
4. Trench depth?			
5. Distance between trenches?			
6. Trench/Pipe Level?			
7. Endcaps in place?			
8. Type and Diameter of pipe?			
9. Proper barrier between gravel and backfill?			
10. If gravelless pipe, fabric cover in place?			
11. Type of media used?			
12. Depth of media?			
Check each of the following required distances (in feet) which are From:	-	-	
1 10111.	Septic Tai		orainfield
Water wells, underground cisterns and pump suction pipes	50	ik L	150
Water supply lines & property lines	10		10
	50		75
Streams, ponds & lakes Sharp slopes, break	50		5
	5 5		
Forement line			15
Easement line Soil Absorption systems	1 5		5
Soil Absorption systems			20
Swimming Pools	15		15
Remarks:		Date	
Inspection conducted by:			
Approved by:		Date:	

# **Authorized Permitting Agents**

• • • • • • •	McCamey	Brewster	Gaines
Cities	McLendon-Chisholm	Brown	Galveston
Abilene	Manville	Burleson	Gillespie
Athens	Noonday	Burnet	Gonzales
Argyle	Oak Ooint	Caldwell	Grayson
Bartonville	Ovilla	Calhoun	Gregg
Beach City	Palmhurst	Callahan	Grimes
Bee Cave	Reno	Cameron	Guadalupe
Bertram	Roma	Cass	Harris
Brady	Shady Shores	Chambers	Harrison
Cottonwood Shores	Shavano Park	Cherokee	Hays
Dalhart	Weatherford	Clay	Henderson
Dawson	West Lake	Coke	Hidalgo
Denton	Willow Park	Collin	Hockley
Double Oak		Colorado	Hood
Elmendorf	• • • • • • •	Comal	Hopkins
Ennis	Counties	Comanche	Houston
Flower Mound	Anderson	Cooke	Howard
Ft. Worth	Andrews	Coryell	Hudspeth
Frisco	Angelina	Dallam	Hunt
Granite Shoals	Aransas	Dallas	Hutchinson
Heath	Archer	Dawson	Jackson
Hickory Creek	Atascosa	Deaf Smith	Jasper
Hill County Village	Austin	Denton	Jefferson
Hollywood Park	Bandera	Dewitt	Jim hogg
Hudson Oaks	Bastrop	Dimmit	Johnson
Ingram	Baylor	Ector	Jones
Joshua	Bee	Ellis	Kaufman
Kerrville	Bell	El Paso	Kendall
Krugerville	Bexar	Erath	Kerr
Krum	Blanco	Fannin	Kimble
Little Elm	Bosque	Fayette	Kinney
Longview	Bowie	Fort Bend	Kleberg
Lubbock	Brazoria	Franklin	Lamar
Lucas	Brazos	Frio	Lampasas

(continued on next page)

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# **Authorized Permitting Agents cont'd**

La Salle	Polk	Waller	Eagle mountain
Lavaca	Potter	Washington	Fork
Lee	Randall	Webb	Granbury
Liberty	Real	Wharton	Greenbelt
Live oak	Red River	Wichita	Inks
Llano	Reeves	Willacy	LBJ
Lubbock	Refugio	Williamson	Limestone
Mclennan	Rockwall	Wilson	Livingston
Mcmullen	Rusk	Wise	Mackenzie
Madison	Sabine	Yoakum	Marble Falls
Martin	San Jacinto	Young	Millers Creek
Mason	San Patricio	Zapata	Nacogdoches
Matagorda	Shackelford	Zavala	Oak Creek
Maverick	Smith		Palestine
Medina	Sterling	• • • • • •	Possum Kingdom
Midland	Somervell	Lakes	Richland Creek
Milam	Tarrant	Amstead	Somerville
Milam Mills	Tarrant Taylor	Amstead Athens	Somerville Spence
Mills	Taylor	Athens	Spence
Mills Mitchell	Taylor Terry	Athens Austin	Spence Travis
Mills Mitchell Montague	Taylor Terry Throckmorton	Athens Austin Bridgeport	Spence Travis
Mills Mitchell Montague Montgomery	Taylor Terry Throckmorton Titus	Athens Austin Bridgeport Bob sandlin	Spence Travis
Mills Mitchell Montague Montgomery Nacogdoches	Taylor Terry Throckmorton Titus Tom Green	Athens Austin Bridgeport Bob sandlin Buchanan	Spence Travis Worth
Mills Mitchell Montague Montgomery Nacogdoches Navarro	Taylor Terry Throckmorton Titus Tom Green Travis	Athens Austin Bridgeport Bob sandlin Buchanan Brownwood	Spence Travis Worth  • • • • • • • Brown County WID
Mills Mitchell Montague Montgomery Nacogdoches Navarro Nueces	Taylor Terry Throckmorton Titus Tom Green Travis Uvalde	Athens Austin Bridgeport Bob sandlin Buchanan Brownwood Carrizo Creek	Spence Travis Worth  • • • • • • • Brown County WID Colorado River MWD
Mills Mitchell Montague Montgomery Nacogdoches Navarro Nueces Orange	Taylor Terry Throckmorton Titus Tom Green Travis Uvalde Val Verde	Athens Austin Bridgeport Bob sandlin Buchanan Brownwood Carrizo Creek Cedar Creek	Spence Travis Worth  • • • • • • • Brown County WID Colorado River MWD Eastland CWSD
Mills Mitchell Montague Montgomery Nacogdoches Navarro Nueces Orange Palo Pinto	Taylor Terry Throckmorton Titus Tom Green Travis Uvalde Val Verde Van Zandt	Athens Austin Bridgeport Bob sandlin Buchanan Brownwood Carrizo Creek Cedar Creek Conroe	Spence Travis Worth  • • • • • • • Brown County WID Colorado River MWD Eastland CWSD Upper Guadalupe RA
Mills Mitchell Montague Montgomery Nacogdoches Navarro Nueces Orange Palo Pinto Parker	Taylor Terry Throckmorton Titus Tom Green Travis Uvalde Val Verde Van Zandt Victoria	Athens Austin Bridgeport Bob sandlin Buchanan Brownwood Carrizo Creek Cedar Creek Conroe Colorado City	Spence Travis Worth  • • • • • • • Brown County WID Colorado River MWD Eastland CWSD Upper Guadalupe RA Lumberton MUD
Mills Mitchell Montague Montgomery Nacogdoches Navarro Nueces Orange Palo Pinto Parker	Taylor Terry Throckmorton Titus Tom Green Travis Uvalde Val Verde Van Zandt Victoria	Athens Austin Bridgeport Bob sandlin Buchanan Brownwood Carrizo Creek Cedar Creek Conroe Colorado City	Spence Travis Worth  • • • • • • • Brown County WID Colorado River MWD Eastland CWSD Upper Guadalupe RA Lumberton MUD